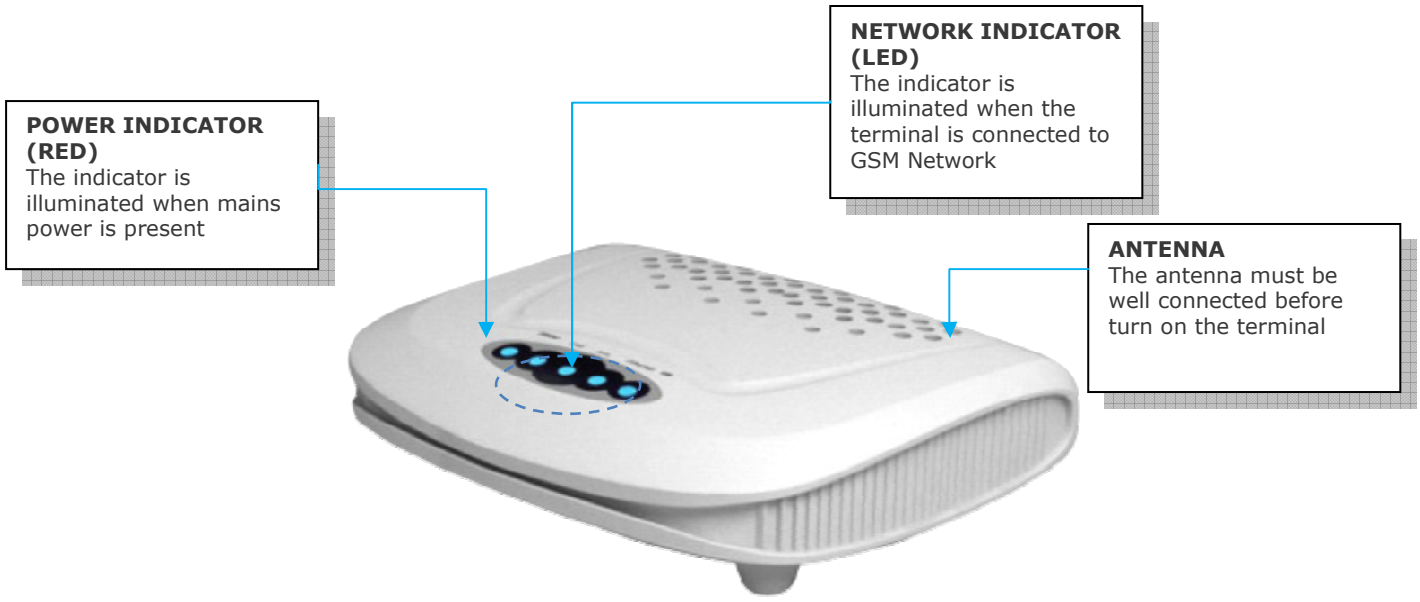
# MXGSM-2

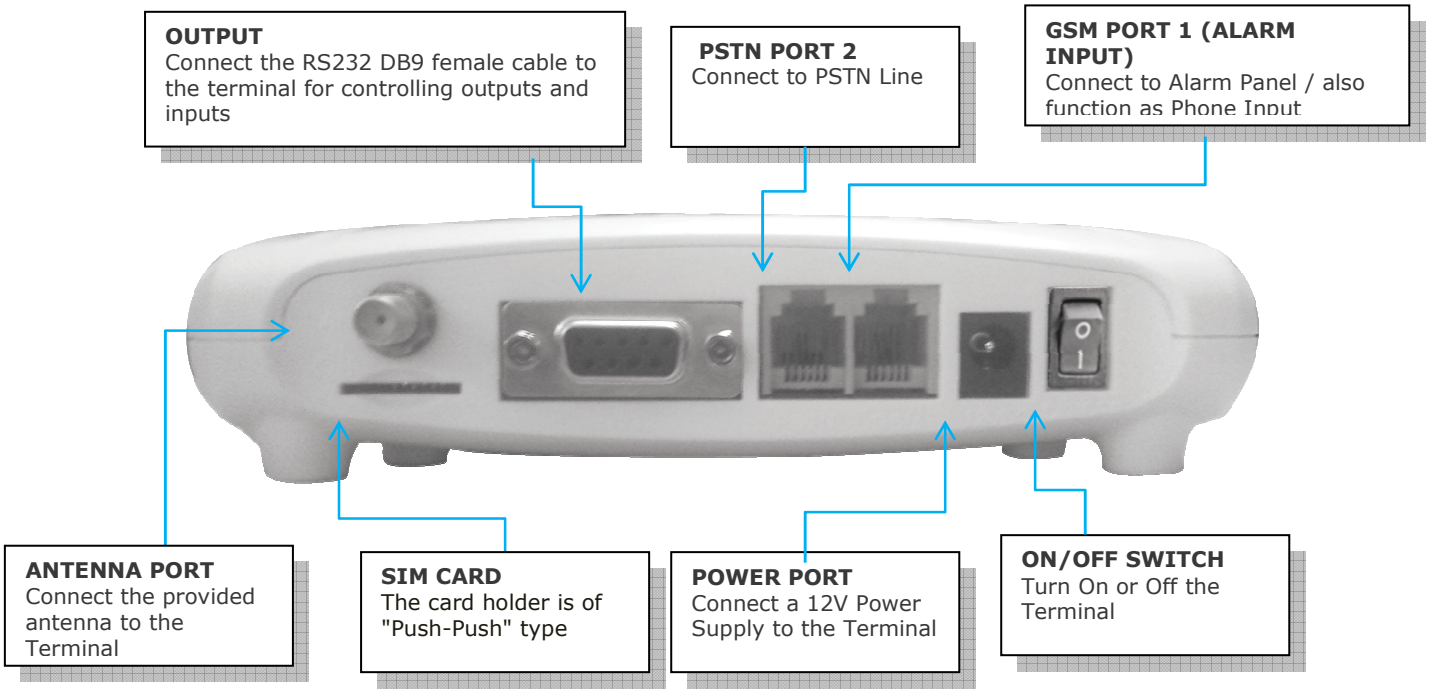
## GSM Terminal use as back up alarm panel

**User Manual**

## Sketch of the MXGSM-2


POWER INDICATOR (RED)
The indicator is illuminated when mains power is present
NETWORK INDICATOR (LED)
The indicator is illuminated when the terminal is connected to GSM Network
ANTENNA
The antenna must be well connected before turn on the terminal

## Installation & Connections


OUTPUT
Connect the RS232 DB9 female cable to the terminal for controlling outputs and inputs
PSTN PORT 2
Connect to PSTN Line
GSM PORT 1 (ALARM INPUT)
Connect to Alarm Panel / also function as Phone Input
ANTENNA PORT
Connect the provided antenna to the Terminal
SIM CARD
The card holder is of "Push-Push" type
POWER PORT
Connect a 12V Power Supply to the Terminal
ON/OFF SWITCH
Turn On or Off the Terminal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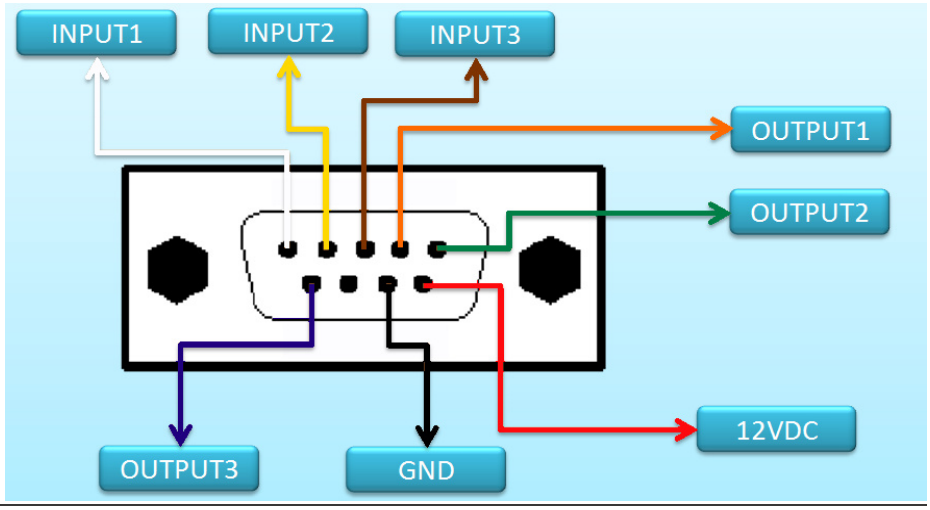
## Wiring Diagram B (DB9 Female Cable)




Please check the following packing list:

| Name | Quantity | Unit |
|---|---|---|
| MXGSM-2 Main Unit | 1 | Set |
| Telephone line | 1 | Set |
| DB9 | 1 | Set |
| Power adapter | 1 | Set |
| 3m GSM terminal antenna | 1 | Set |
| CD User's Manual | 1 | Set |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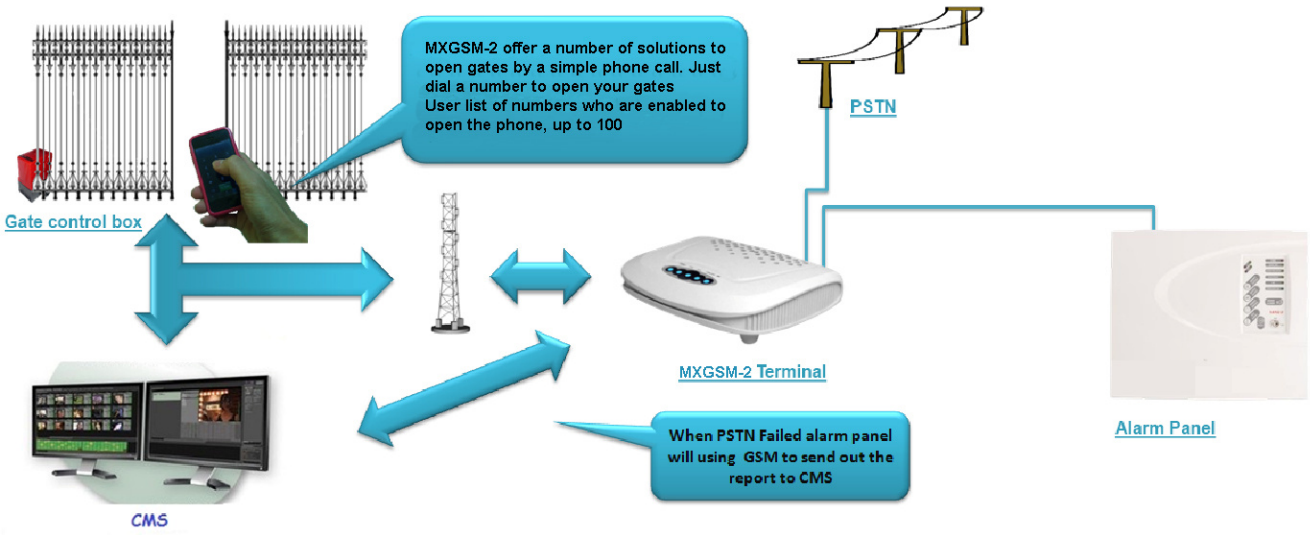
## 1. Introduction to the MXGSM-2 GSM Alarm System

The MXGSM-2 GSM Terminal is a wireless communicator for alarm and fire panels that uses the cell phone network (GSM) to transmit alarms and other panel event. The module checks the status of the PSTN line and in case the PSTN line becomes unavailable, the MXGSM-2 GSM emulate the line signal to the panel. At this time, the panel will dial out using the GSM cell phone network to communicate with the receiver at the monitoring station and transmit the alarms.MXGSM-2 offer a number of solutions to open gates by a simple phone call. Just dial a number to open your gates. MXGSM-2 User List of numbers who are enabled to open the phone, up to 100.

### GENERAL OVERVIEW:


MXGSM-2 offer a number of solutions to open gates by a simple phone call. Just dial a number to open your gates
User list of numbers who are enabled to open the phone, up to 100
PSTN
Gate control box
MXGSM-2 Terminal
Alarm Panel
When PSTN Failed alarm panel will using GSM to send out the report to CMS
CMS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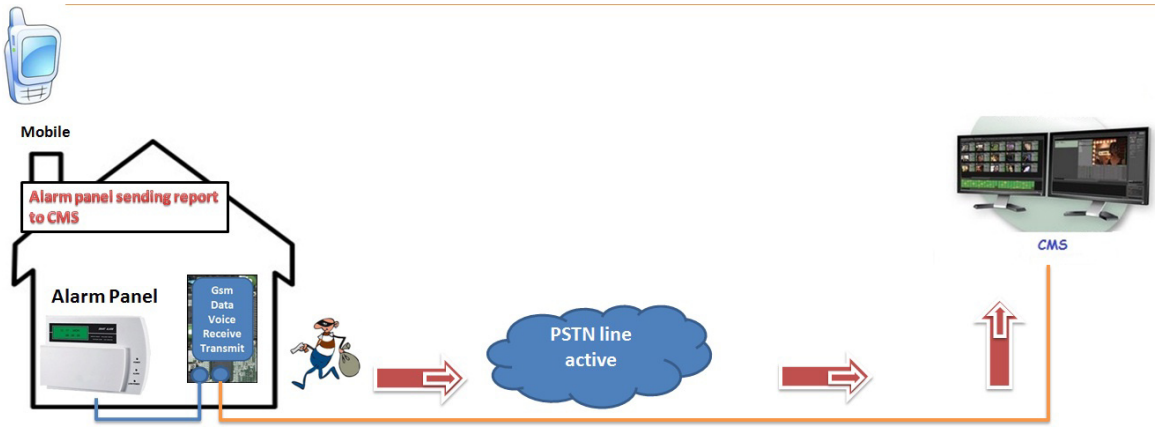
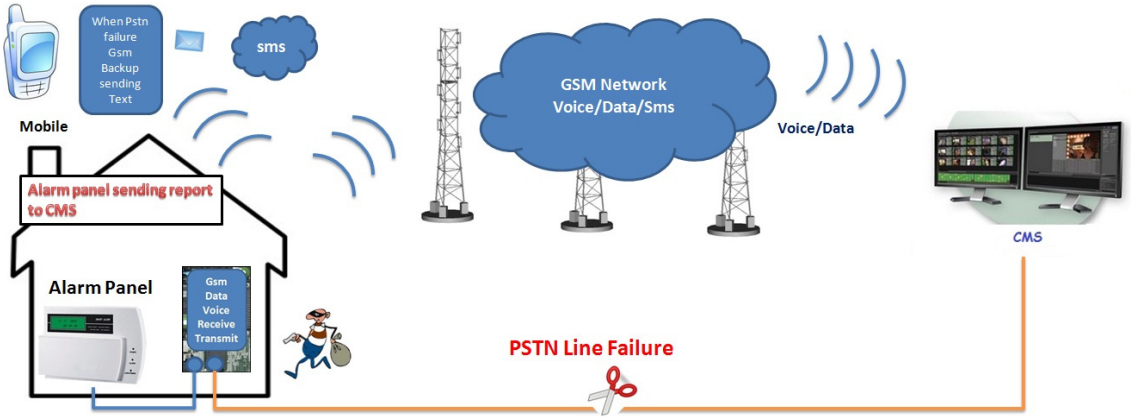

Mobile
Alarm panel sending report to CMS
Alarm Panel
Gsm
Data
Voice
Receive
Transmit
PSTN line active
CMS


When Pstn failure Gsm Backup sending Text
sms
Mobile
GSM Network Voice/Data/Sms
Voice/Data
Alarm panel sending report to CMS
Alarm Panel
Gsm
Data
Voice
Receive
Transmit
CMS
PSTN Line Failure

## 2. Main Features of the MXGSM-2

1. Panel compatibility - Allows any contact ID alarm panel to transmit alarms over GSM using the GSM voice channel
2. Telephone line backup:MXGSM-2 give priority to the lowest cost network. MXGSM-2 uses the telephone line as the main transmission line and uses the GSM voice channel as backup
3. MXGSM-2 offers a number of solutions to open gates by a simple phone call. Just dial a number to open your gates. MXGSM-2 User List of numbers who are enabled to open the phone, up to 100.
4. Programmable CMS Account Number: The MXGSM-2 has built-in alarm inputs that allow the unit to send additional signals (with user programmable Account number) to the CMS monitoring station. The Alarm Events that available in this system are Input, PSTN Failure, AC Failure and Auto Test. Supported Protocol: ( Ademco Contact ID)
5. Sends text messages to user programmable cell phone number (SMS): The MXGSM-2 can be programmed to send a SMS to a programmable cell phone number to notify the user that the PSTN line has been cut off or unavailable.
6. Three digital inputs: The system has the function to send SMS and call to the user in the event of input triggered. For example, Input 3 connected to an electric door, when there is intruder or the electric door is open illegally, MXGSM-2 will receive short circuit impulse on Input 3 and automatically sends a signal to the pre-set number and notify the owner or send reporting to CMS (Ademco Contact ID)
7. Three remote control outputs: These open collector outputs (that can sink max 300ma per output) can be turned on and off remotely through a SMS or phone call. Remote control will be reachable by sending a SMS or phone call with a certain command. For example SMS/Call in to switch on lighting, air conditional, generator, sensor or other equipment.
8. Standby rechargeable battery to prevent power failure or electricity cut off by intruder. The GSM will function as normal when no electricity supply. LED to check the GSM signal strength.
9. Low power consumption - uses 30mA while in idle state and 260mA when transmitting an alarm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## 3. Installation Instructions

Note: It is essential that you read the step by step instructions fully prior to installing and programming the unit

### 3.1) Description

1. **Antenna**: connect the antenna to the GSM module; place the antenna as far as possible from the MXGSM-2 and do not leave any coiling of the antenna cable to avoid radiant interference
2. **SIM Card**: disable the PIN code and set it to 1234 (default)
   For Transmitter Mode (Data or SMS): as with any transmitter, it requires an identifier, receiver telephone numbers, etc (refer to the complete information on Programming page)
3. **Line Input**: connect the line input to the PSTN or ISDN network.
4. **Outputs (Back-Up Mode)**: connect the RS232 DB15 to additional remote controlling outputs.
5. **Alarm Input**: connect the input to output of the Alarm Panel / Control Panel.
6. **Power Supply**: connect to a 12V power supply
7. **Operating State**: Approximately 20s after power up check the operating state indicated by the Power SIM LED: the LED is steady during power up phase, and then blinks when the connection to the GSM network is established. The Signal indicator LED will stay lit whenever there is signal.


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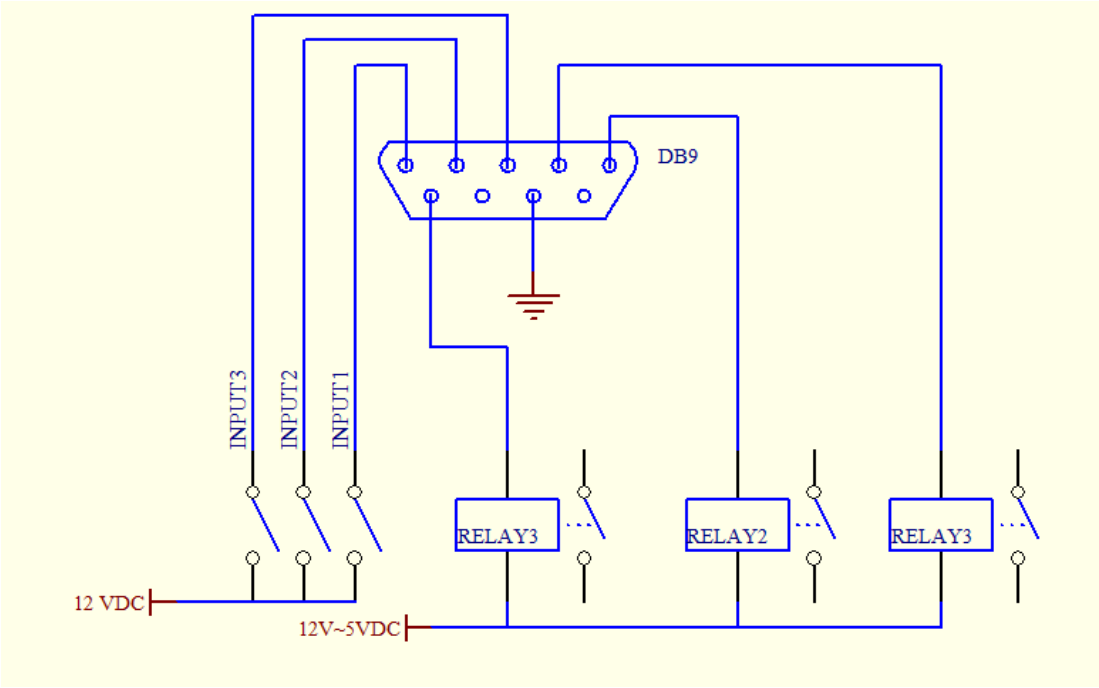
## 3.2) MXGSM-2 Inputs and Outputs Wiring Instructions

RLY1 (OUT1), RLY2 (OUT2), RLY3 (OUT3) Remote Controlling Outputs

These open collector outputs can be turned on and off remotely through a SMS. Remote control will be reachable by sending a SMS with a certain command.
Note: When sending normal SMS with command below, the MXGSM-2 will turn On / Off the output relay and reply a message of output has turned On / Off to a programmable phone numbers.

INPUT1, INPUT2, INPUT3

Connect INPUT1, INPUT2 and INPUT3 to inputs panel, when there is a short-circuit impulse on (INPUT1, INPUT2, INPUT3), the MXGSM-2 is possible to send SMS to a programmable phone numbers.

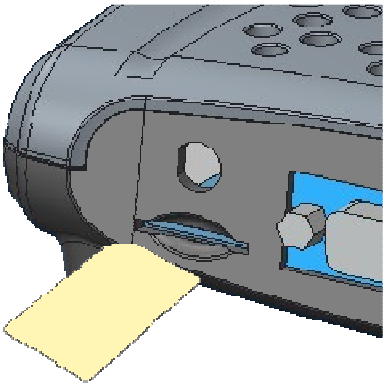



Inputs and Outputs Wiring Diagram

## 3.3) SIM Card Installation

Note: Make sure that the MXGSM-2 GSM terminal is not locked with a particular GSM network. This means that a user may use SIM card of any GSM service provider with a possibility to send SMS and to call.

In order to control the module via a short call, SIM card should be have Caller ID option. Usually SIM cards have such option. If your card can not identify a caller, please contact GSM service provides or use another SIM card.



| |
|---|
| Locate SIM card into a holder. Card's circuitry should look downward and card's key (cut angle) should look upwards. The card holder is of "Push-Push" type. This means that after pushing the card once, it is fixed and after pushing it again - it is released. |
| Locate SIM card into a holder. |
| |
| Note: do not locate SIM card with force, because you may damage SIM card holder. |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## 3.4) Meaning of LEDs MXGSM-2

| Name | Indication Variations | Meaning |
|---|---|---|
| BUS(blue) | Flashes | Power supply ok and the MXGSM-2 is registered to GSM network. |
| | Lights continuously | MXGSM-2 power supply is ok, but the MXGSM-2 failed to register to the GSM network. |
| | Off | MXGSM-2 power supply failure or it is switched off |
| SIMCard(blue) | Lights continuously | MXGSM-2 has been registered to the network. |
| | Flashes, remains lit for 50ms, turn off for 300ms. | MXGSM-2 is being registered to the GSM network. |
| | Off | MXGSM-2 failed to register to the network. |
| Network(Blue) | Lights continuously | The MXGSM-2 is functioning. |
| | Off | The MXGSM-2 is out of order or Failed. |


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# 4. MXGSM-2 Programming Instructions (Via Fixed Line Phone)

## 4.1 Introduction

The MXGSM-2 can be programmed manually by a connected normal telephone.

Note: Before commencing programming it is advisable to read the below programming setting instructions thoroughly. To start with programming, user must plug-in a normal single line phone to GSM.

### Step 1. Description for setting


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Entering the setting "**99999*" from a DTMF Phone in order to go into the Setting Mode. When hang-up the phone, it will save and quit from the setting mode. Pick up the Handset or press hands free, press **999999* to enter programming mode. If the password has entered correctly, you should If the setting is successful, there is a du~……." sound. If the setting is wrong, there is a "~**du~du~du~…** ~" sound

Now you may proceed with programming settings.

1. **Reset the MXGSM-2.**

   To reset the unit, you can continue pressing *88*1# If the setting is successful, there is a "du~……." sound.

2. **Changing MXGSM-2 Password**

   Continue pressing *99*xxxxx# If the setting is successful, there is a "du~……." sound.

3. **Programming the Administrator/CMS Number.**

   Administrator number 1 you should Continue pressing *1*xxxxxxxxxxxxxxxxx# If the setting is successful, there is a "du~……." sound.

   You may continue to program administrator number 2, 3, 4, and 5 by pressing *02* xxxxxxxxxxxxxxxxx# , *3* xxxxxxxxxxxxxxxxx# , *4* xxxxxxxxxxxxxxxxx# , *5* xxxxxxxxxxxxxxxxx#

4. **To Delete administrator 1.**

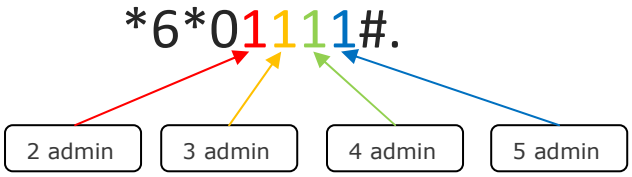
   Continue pressing *1*# If the setting is successful, there is a "du~……." sound.

   You may continue to program administrator number 2, 3, 4, and 5 by pressing *2*# , *3*# , *4*# , *5*# .
   Note: It is possible to program up to 20 digits for a telephone number

5. **Setting the Recipient that will receive Alert Messages**

The unit can send text alerts to 1 or all 5 administrator of the programmed administrator 1 numbers to not receive alert messages.

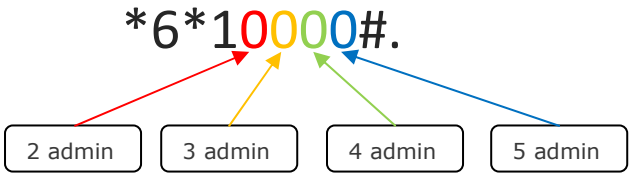
You may continue to program administrator number 2, 3, 4, and 5 by pressing




6. **Setting the Recipient that will not receive Alert Messages**

The unit can off send text alerts to 1 or all 5 of the programmed administrator 1 numbers to receive alert messages

You may continue to program administrator number 2, 3, 4, and 5 by pressing




7. **Programming the Area Code**

Continue pressing *15*xxxxx# If the setting is successful, there is a “du~……” sound.

8. **Programming to delete Area Code**

Continue pressing *15*# If the setting is successful, there is a “du~……” sound.

9. **Setting the dialing Speed to dialing out**

To set the required dialing on 3 seconds Continue pressing *16*03# If the setting is successful, there is a “du~……” sound.

10. **Clock Setting**

To set the time at 14.00.00 continue pressing *9*140000# If the setting is successful, there is a “du~……” sound.

**Noted:** The clock setting number must entered in **6** digits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11. **Setting the Account Number for CMS**

To set the account number as 9999 continue pressing *8*9999# If the setting is successful, there is a “du~……” sound.

Delete CMS account number *8*# If the setting is successful, there is a “du~……” sound.

12. **Setting the Auto Test Report Time Section 1**

To set the auto test report time at 12.00.00 continue pressing *10*120000# If the setting is successful, there is a “du~……” sound.

13. **Setting the Auto Test Report Time Section 2**

To set the auto test report time at 13.00.00 continue pressing *11*130000# If the setting is successful, there is a “du~……” sound.

14. **Setting the Auto Test Report Time Section 3**

To set the auto test report time at 14.00.00 continue pressing *12*140000# If the setting is successful, there is a “du~……” sound.

15. **Auto test Enable the function of Reports to CMS**

Continue pressing *13*1# If the setting is successful, there is a “du~……” sound.

16. **Auto test Disable the function of Reports to CMS**

Continue pressing *13*0# If the setting is successful, there is a “du~……” sound.

17. **Enable the generation of sms report for auto test**

Continue pressing *14*1# If the setting is successful, there is a “du~……” sound.

18. **Disable the generation of sms report for auto test**

Continue pressing *14*0# If the setting is successful, there is a “du……~…” sound.

19. **Setting the Burst On and Burst Off time of DTMF tones for CMS reporting**
Description:


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Value: 1 stands for 10~20ms continue pressing *31*11# If the setting is successful, there is a "du~……" sound.

Value: 2 stands for 20~40ms continue pressing *31*22# If the setting is successful, there is a "du~……" sound.

Value: 3 stands for 50~60ms continue pressing *31*33# If the setting is successful, there is a "du~……" sound.

Value: 4 stands for 60~80ms continue pressing *31*44# If the setting is successful, there is a "du~……" sound.

Value: 5 stands for 80~100ms continue pressing *31*55# If the setting is successful, there is a "du~……" sound.

**20. Setting for PSTN send sms Failure**

Turn on when PSTN Failure generation SMS continue pressing *19*1# If the setting is successful, there is a "du~……" sound.

Disable send SMS when PSTN Failure continue pressing *19*0# If the setting is successful, there is a "du~……" sound.

**21. Setting for PSTN sending report to CMS (Failure)**

Turn on when PSTN Failed generation sending report to CMS continue pressing *20*1# If the setting is successful, there is a "du~……" sound.

Disable sending report when PSTN Failure continue pressing *20*0# If the setting is successful, there is a "du~……" sound.

**22. Setting for PSTN send to CMS when the PSTN connected**

Turn on send report to CMS when the PSTN connected continue pressing *21*1# If the setting is successful, there is a "du~……" sound.

Disable sending report to CMS when the PSTN connected continue pressing *21*0# If the setting is successful, there is a "du~……" sound.

**23. Setting for AC Failure**


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**Stands for generation of SMS when AC failed** continue pressing *22*1# If the setting is successful, there is a “du~……” sound.

**Disable send SMS when AC failed** continue pressing *22*0# If the setting is successful, there is a “du~……” sound.

**Stands for send to CMS when AC failed** continue pressing *23*1# If the setting is successful, there is a “du~……” sound.

**Disable send to CMS when AC failed** continue pressing *23*0# If the setting is successful, there is a “du~……” sound.

**Stands for send to CMS when AC connected** continue pressing *24*1# If the setting is successful, there is a “du~……” sound.

**Disable send to CMS when AC connected continue** pressing *24*0# If the setting is successful, there is a “du~……” sound.

24. **Input Settings**

**Stands for generation of SMS when input triggered (0 Volt low Pulse) (OFF)** continue pressing *25*1# If the setting is successful, there is a “du~……” sound.

**Disable send SMS when input triggered (0 Volt low Pulse) (OFF)** continue pressing *25*0# If the setting is successful, there is a “du~……” sound.

**Stands for generation of SMS when input triggered (5~12 volt high Pulse) (ON)** continue pressing *26*1# If the setting is successful, there is a “du~……” sound.

**Disable send SMS when input triggered (5~12 volt Pulse) (ON)** continue pressing *26*0# If the setting is successful, there is a “du~……” sound.

**Stands for send report to CMC when input triggered** continue pressing *27*1# If the setting is successful, there is a “du~……” sound.

**Disable send to CMS when input triggered** continue pressing *27*0# If the setting is successful, there is a “du~……” sound.

25. **Enable/Disable System Power Up SMS Notification**

Enable the Power up SMS notification continue pressing *32*1# If the setting is successful, there is a “du~……” sound.

Disable the power up SMS notification continue pressing *32*0# If the setting is successful, there is a “du~……” sound.

26. **Ignore the front dialing digits when dialing the Administrator or CMS number via Voice**


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To set the unit to ignore first 2 dialing digits you can continue pressing *18*2# If the setting is successful, there is a “du~……” sound.

Disable the **Ignore the front dialing digits** continue pressing *18*0# If the setting is successful, there is a “du~……” sound.

### 27. Adjusting the Speaker and Microphone Volume level via Voice (max 4 Level)

To adjust the speaker volume to 4 and microphone volume to 4 you can continue press *17*44# If the setting is successful, there is a “du~du~du~…” sound

## 5. MXGSM-2 Programming Instructions (Via SMS)


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The Administrator number must be programmed into the MXGSM-2 unit first via phone mode or via SMS by password.

Programming the MXGSM-2 can also be done via SMS commands using your phone. Any programming command sent by SMS must be in CAPITAL letters. The fields between square brackets are parameters; do NOT enter the square brackets. When you send a command, you will receive the answer for the first time even if your GSM number is not in the administrator list. This happens because the MXGSM-2 recognizes any GSM number as administrator and answers to it.

## 5.1 MXGSM-2 Use password to Programming the Administrator/CMS Number. (Via SMS)

The 5 administrator numbers can be programmed with a text command via SMS.

Text Command:
*PSS*[PPPPP]*ADM[N]#XXXXXXXXXX

PPPPP stands for Password
N stands for administrator number
XXXXXXXXXX stands for the phone number you want to program as Administrator.

Please note that it is possible to program up to a maximum of 16 digits for a phone number.

Example:
To program phone number 99938388383 as administrator into list number 1, you would send the following SMS command to the unit.

*PSS*99999*ADM1#99938388383

Return Message
admin1=99938388383

## 5.2 MXGSM-2 Programming the Administrator/CMS Number. (Via SMS)


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Note: It is advised that the owner should set the system to allow programming access for administrators only after programming the Administrator numbers via SMS program by password.

The 5 administrator numbers can be programmed with a text command via SMS.

Text Command:
*ADM[N]*XXXXXXXXXX

N stands for administrator number
XXXXXXXXXX stands for the phone number you want to program as Administrator.

Please note that it is possible to program up to a maximum of 16 digits for a phone number.

Example:
To program phone number 99938388383 as administrator into list number 1, you would send the following SMS command to the unit.

*ADM1*99938388383

Return Message
admin1=99938388383

To delete the administrator number

*ADM2*#

Return Message
admin2-delete

## 5.3 Setting the Recipient that will Received Alert Messages via SMS


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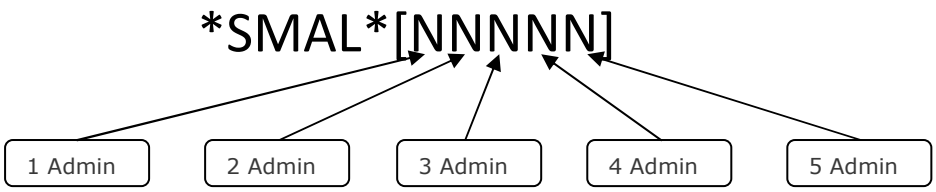
The unit can send text alerts to 1 or all 5 of the programmed administrator's numbers, via SMS

Text Command:




N stands for administrator ON (**1**) or OFF (**0**) value

Example:

If you want the receive alert message to administrator 1 and 2 you would send the following SMS message to the unit.

*SMAL*11000

| Return Message |
| --- |
| Admin Receive Alert<br>1=On<br>2=On<br>3=OFF<br>4=OFF<br>5=OFF |

Default Value: 10000

## 5.4 Programmed the Account Number for Event Reporting to CMS (Ademco Contact ID) via SMS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When Input failure, PSTN failure, AC failure or Auto Test, the MXGSM-2 GSM Terminal will dial the programmable central monitoring station number and transmit the account number along with Ademco Contact-ID to the central station.

Programmed account number for CMS
Text command:

| SMS command |
| --- |
| *CMSN*[NNNN] |

N stands for CMS Account number

Example:
It you want to set account number 9999 you would send the following SMS message to the unit.
*CMSN*9999

| Return Message |
| --- |
| CMS Acc-9999 |

To delete CMS account number you can follow the below text command:
*CMSN*#

| Return Message |
| --- |
| CMS Acc-delete |

## 5.5 Programmed time via SMS


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To set the time, you can send the following SMS command to the unit. The time is entered in 24 Hour format.

Text command:

Programmed time via SMS

| SMS command |
| --- |
| *TIME*[HH]:[HH] |

HH stands for 2 digits value: Hour

Example:

It you want to program time at 17:55 you would send the following SMS message to the unit.

*TIME*17:55

| Return Message |
| --- |
| TIME-OK |

## 5.5 Programmed the Auto Test Report Time Section 1, 2, 3 report via SMS

The system has the function of sending the test report to the central station at the programmable time section. The time is entered in 24 Hour format.

To program the auto test report time section 1

| Text command: |
| --- |
| *TSE[S]*[HH]:[HH] |

HH stands for 2 digits value: Hour

S stands for sections 1, 2, 3

Example:

(Section 1) To program the auto test report time at 00:55

*TSE1*00:55

| Return Message |
| --- |
| Auto Test Report<br>Section1=00:55 |

## 5.6 Auto test enable and disable the function of Reports to CMS


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To enable the auto test function of report to CMS

| SMS command |
| --- |
| *CMST*[V] |

V stands for enable and disable the auto test reports ON (**1**) or OFF (**0**) value

Example:

If you want to enable the auto test of reporting to CMS you can follow the below text:
*CMST*1

| SMS command |
| --- |
| Auto Test CMS Enable |

## 5.7 Auto test enable and disable the function of Reports SMS to admin number.

To enable the auto test function of report to SMS

| SMS command |
| --- |
| *MMST*[V] |

V stands for enable and disable the auto test reports ON (**1**) or OFF (**0**) value

Example:

If you want to enable the auto test of reporting SMS you can follow the below text:

*MMST*1

| SMS command |
| --- |
| Auto Test SMS Enable |

## 5.8 Programming the Area Code via SMS


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To program the area code into the system, you can send the following SMS command to the unit.

Setting Example:

Text Command:

*ACOD*XXXX

XXXX stands for 4 digits value: Area Code

Example:

If you want to program area code 1234 follow the below text:

*ACOD*1234

Return Message

Area Number =1234

Programming to delete Area Code number

*ACOD*#

Return Message:

Area Number=DEL

## 6. Adjusting the Speaker and Microphone Volume level via SMS


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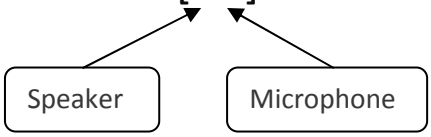
To adjust the speaker and microphone volume level.

SMS command

*VOLU*[VV]




V stands for Level (max 4 Level)

Example:

To adjust the speaker volume to 4 and microphone volume to 4

*VOLU*44

Return Message

SPK=4 MIC=4

## 6.1 Enable and disable for PSTN send SMS reports when failed or connected

Enable the unit to send report SMS to Administrator, you can send the following SMS command to the unit.

SMS command

*PSMS*[V]

V stand for enable and disable, when PSTN failed or connected the unit report SMS to administrator. ON (**1**) or OFF (**0**) value

Example:

If you want to enable the PSTN of reporting SMS you can follow the below text:
*PSMS*1

Return Message:

PSTN Report

SMS=ON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## 6.2 Enable and disable for reports PSTN failed or connected to CMS

Enable the unit to send report to CMS when PSTN failed or connected, you can send the following SMS command to the unit.

| SMS command |
| --- |
| *PCMS*[V] |

V stand for enable and disable, when PSTN failed or connected the unit report SMS to administrator. ON (**1**) or OFF (**0**) value

Example:

If you want to enable the PSTN of reporting SMS you can follow the below text:
*PCMS*1

| Return Message: |
| --- |
| PSTN Report |
| CMS=ON |

## 6.3 Enable and disable for reports AC power failed or connected to send SMS report to administrator

Enable the unit to send report via SMS when AC power failed or connected, you can send the following SMS command to the unit.

| SMS command |
| --- |
| *ASMS*[V] |

V stand for enable and disable ON (**1**) or OFF (**0**) value

Example:

If you want to enable the AC of reporting SMS you can follow the below text:
*ASMS*1

| Return Message: |
| --- |
| ADC Report |
| SMS=ON |


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### 6.4 Enable and disable for sending reports to CMS when AC power failed or connected

Enable the unit to send report to CMS when AC power failed or connected, you can send the following SMS command to the unit.

| SMS command |
| --- |
| *ACMS*[V] |
| V stand for enable and disable ON (**1**) or OFF (**0**) value<br><br>Example:<br>If you want to enable the AC of reporting to CMS you can follow the below text:<br>*ACMS*1 |
| Return Message:<br>ADC Report<br>CMS=ON |


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## 6.5 Input Settings (5~12 volt high Pulse) Stands for generation of SMS

Stands for generation of SMS when input triggered (5~12 volt high Pulse) (ON) you can send the following SMS command to the unit.

| SMS command |
| --- |
| *INOS*[V] |
| V stand for enable and disable ON (**1**) or OFF (**0**) value |
| Example:<br>If you want to enable the input of reporting to admin via SMS you can follow the below text:<br>*INOS*1 |
| Return Message:<br>Input Report<br>SMS O=ON |

## 6.6 Input Settings (0 volt low Pulse) stands for generation of SMS

Stands for generation of SMS when input triggered (0 volt low Pulse) (ON) you can send the following SMS command to the unit.

| SMS command |
| --- |
| *INCS*[V] |
| V stand for enable and disable ON (**1**) or OFF (**0**) value |
| Example:<br>If you want to enable the input of reporting to admin via SMS you can follow the below text:<br>*INCS*1 |
| Return Message:<br>Input Report<br>SMS C=ON |


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## 6.7 Input setting stands for send report to CMC when input triggered high pulse or low pulse.

If you want to program when input triggered high pulse or low pulse send report to CMS. You can send the following SMS command to the unit.

| SMS command |
| --- |
| *INCM*[V] |
| V stand for enable and disable ON (**1**) or OFF (**0**) value |
| Example:<br>If you want to enable the input of reporting to admin via SMS you can follow the below text:<br>*INCM*1 |
| Return Message:<br>Input Report<br>CMS =ON |

## 6.8 (Power up messages) stand for generation of SMS when MXGSM-2 is

The system is able to generate SMS notification whenever the MXGSM-2 is turned on. To enable this function,

| SMS command |
| --- |
| *POWP*[V] |
| V stand for enable and disable ON (**1**) or OFF (**0**) value |
| Example:<br>If you want to enable the input of reporting to admin via SMS you can follow the below text:<br>*POWP*1 |
| Return Message:<br>Power UP Report<br>SMS=ON |


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## 6.9 Activate the output relay number when input triggered

You can activate the output when an input is triggered, you can send the following SMS command to the unit.

| SMS command |
| --- |
| *INT[N]*OUT[Y] |

N stand for input number 1, 2, 3
Y stand for output number 1, 2, 3

Example:

If you want to program the input 2 triggered to activate output 3 you can follow the below text:
*INT2*OUT3

| Return Message: |
| --- |
| IN2-OUT3 |

## 7. Editing the Inputs Alert Messages (detecting 5~12VDC triggered) (Up to 50 Characters) via SMS

The Input Alert Message can be edited and programmed up to 50 characters. You can change the displayed text by sending the following commands by SMS message to the unit. Note: Only support normal abc/ABC English text, no special characters.

Setting Example:

If you want the alert message to display “Garage Opened!”

| SMS command |
| --- |
| *INO[N]*Garage Opened! |

N stands for Input number 1 – 3
XXXXXX… stands for alert message content

Example:

If you want the alert message to display “Garage Opened!” when the input 1 is detecting 5~12vdc triggered; you would send the following SMS message to the unit.

*INO1*Garage Opened!

| Return Message |
| --- |
| INO1-Garage Opened! |


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## 7.1 Editing the Input Alert Message For (detecting 0 VDC triggered) ) (Up to 50 Characters)

The Input Alert Message can be edited and programmed up to 100 characters long. You can change the displayed text by sending the following commands by SMS message to the unit. Note: Only support normal abc/ABC English text, no special characters.

Text Command:
*INC[N]*XXXXX…

N stands for number 1 - 3 of Input
XXXXX… stands for the display text that you want to program

Example:
If you want the alert message to display “Garage Closed!” when input 1 is detecting 0VDC triggered; you would send the following SMS message to the unit.
*INC1*Garage Closed!

Return Message
INC1-Garage Closed!

## 7.2 Editing the Outputs (Open) Alert Messages (Up to 50 Characters)

The Output Alert Message can be edited and programmed up to 50 characters. You can change the displayed text by sending the following commands by SMS message to the unit. Note: Only support normal abc/ABC English text, no special characters.

SMS command
*OPO[N]*Garage Opened!

N stands for Output number 1 – 3
XXXXXX… stands for alert message content

Example:
If you want the alert message to display “Garage Opened!” when output 1(Open) triggered; you would send the following SMS message to the unit.
*OPO1#Garage Opened!

Return Message
OPO1-Garage Opened!


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## 7.3 Editing the Outputs (Closed) Alert Messages (Up to 50 Characters)

The Output Closed Alert Message can be edited and programmed up to 50 characters. You can change the displayed text by sending the following commands by SMS message to the unit. Note: Only support normal abc/ABC English text, no special characters.

| SMS command |
| --- |
| *OPC[N]*Garage Closed! |

N stands for Output number 1 – 3
XXXXXX… stands for alert message content

Example:

If you want the alert message to display “Garage Closed!” when output 1 (Closed) triggered; you would send the following SMS message to the unit.

*OPC1#Garage Closed!

| Return Message |
| --- |
| OPC1-Garage Closed! |


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## 7.4 Activate Output to Stay On for a Specific Time

the output should stay on to the unit. It is possible to set up to maximum of 99,999 seconds.

Noted: Only can activate by administrators.

Text Command:

*ORS[N]*XXXXX

N stands for Output number 1 - 3

XXXXX stands for 5 digits value: The number of seconds (00000-99999)

For example, assume you want to turn on the output number 2 for 1 hour, you would send the following SMS message to the unit.

*ORS2*03600

Return Message

Relay2 Open

Sending the following SMS Message to unit would mean turn off the output relay number 1.

*ORS1*00000

Example of Returned Message

**Relay2 Close**

**Note:** The reply message will be send to the recipients (The Administrators) only when the relay has turned on/off. This is to notify the administrators.


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## 7.5 Activate the Output Relay to Stay On

To activate the output relay to stay on, you can send the following commands by SMS message to the unit.

Noted: Only can activate by administrators.

Text Command:

*ORS[N]*X

N stands for number **1** - **3** of Output
X stands for ON (**1**) or OFF (**0**) value

- To activate the output relay number 2 to stay on indefinitely, the syntax of the command is the following:

  ***ORS2*1**

Return Message

*Relay2 Open

**Note:** The reply message will be send to the recipients (The Administrators) only when the relay has turned on/off. This is to notify the administrators.


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## 7.6 Setup User List to trip the output 1,2,3 via SMS

**Warning!** The administrator number must be programmed into the MXGSM-2 unit first via Phone mode in order to setup USER LIST. Only administrator can be programmed.

User lists, It is used to add or remove numbers that are enabled to trip the output1-3 into the User lists. You can add up to 100 numbers in the list. Every position must be indicated in the command and we advise you to keep a list written somewhere to know which numbers are in and in which position.

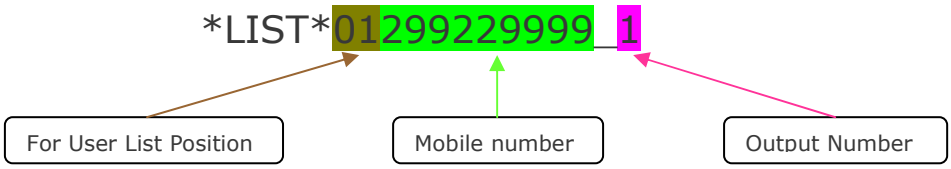
To add a User list 1 number trip output1, the syntax of the command is the following:

Text Command:

*LIST*[H][xxxxxxxxxx]_[N]

H stands for position in the lists 00 – 99
X stands for mobile number XXXXXXXXXXX
N stands for Output number 1 - 3

For example, you want to set User list 1, mobile number 299229999 to trip output 1, you would send the following SMS message to the unit.




Return Message

User list 01=299229999 trip output1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## 7.7 Check User List Number by individually via SMS

To check number individually in a place of the user lists is:
H stands for position in the lists 00 - 99 to check

Text Command:

*LIST*[H]?

For example, you want to Check User List positions 1 which relay to control? You would send the following SMS message to the unit.

*LIST*01?

Return Message

01=299229999_3

## 7.8 Erase User List Number via SMS

To erase the individually user list number.

Text Command:

*LIST*[H]D

H stands for position in the lists 00 – 99

For example, you want to Erase User list position number 01

*LIST*01D

Return Message

User list 01 DEL

To erase all number

*LIST*ALLD

Return Message

DELETE ALL OK


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## 7.9 Output Pulse time via SMS

Output pulse time. This command is useful in case you need to keep the button pressed longer. The standard time is 1 second (Maximum 99999 seconds). You can change it with the PUS command.
The syntax of the command is the following:

XXXXX stands for **5** digits New Password

Text Command:

*PUS[N]*[H]

H stands for 00001-99999 seconds
N stands for Output 1 - 3

*PUS2*00002

With the above command, the opening output1 time has been set to 2 seconds

Returned Message:

PUS2-00002


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## 8. Use password to control the output stay On via SMS

You can use a Password that makes it impossible for anybody to control the output via SMS.

P stands for password
N stands for ON (**1**) or OFF (**0**) value
X stands for number **1** - **3** of Output

| Text Command: |
| --- |
| *PSS*[PPPPP]*ORS[X]#[N] |

- To activate the output relay number 2 to stay on indefinitely, the syntax of the command is the following:
  ***PSS*99999*ORS2#1**

| Return Message |
| --- |
| *Relay2 Open |

## 8.1 Use password to control the output stay Specific Time

You can use a Password that makes it impossible for anybody to control the output stay specific time via SMS.

P stands for password

N stands for Output number 1 - 3

XXXXX stands for 5 digits value: The number of seconds (00000-99999)

Text Command:

*PSS*[PPPPP]*ORS[N]#[XXXXX]

For example, assume you want to turn on the output number 2 for 1 hour, you would send the following SMS message to the unit.

*PSS*99999*ORS2#03600

Return Message

Relay2 Open

Sending the following SMS Message to unit would mean turn off the output relay number 2.

*PSS*99999*ORS2#00000

## 8.2 Reset the MXGSM-2 unit via SMS

To reset the unit, you can send the following command by SMS to the unit.

SMS Command:

*FACTORY*99999

XXXXX stands for 5 digits password based on *FACTORY# (Default: 99999) and it can be changed anytime.

Return Message

Factory Default-ok


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## 8.3 Changing the Programming Mode Password via SMS

It is possible to change the login password by sending the following SMS command.

XXXXX stands for **5** digits New Password

| SMS Command: |
| --- |
| *CPWC*XXXXX |

Example:

To change the password to 88888, you would send the following SMS command to the unit.

*CPWC*88888

| Return Message: |
| --- |
| CPWC-OK |

## 8.4 Checking the Signal Strength via SMS

Check GSM signal quality. This command is useful to see what the GSM network signal level is.

| SMS Command: |
| --- |
| *CSS?* |

| Example of Return Message |
| --- |
| Signal Strength:(28) |


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## 8.5 Inquire the Software and Hardware Version of MXGSM-2 Terminal via SMS

To check the software and hardware version of MXGSM-2 unit, by sending the following SMS command.

SMS Command:

*ISN?*

Example of Return Message

HW: 1.1ver  SW: 4.7ver MW: 5.6ver

## 8.6 Inquire All Programmed Administrator via SMS

To inquire all the programmed administrator/central station number, you can send the following SMS command.

SMS Command:

*ADM?*

Example of Return Message

1: 13256997049
2: 15915325252
3: 13456679988
4:

Example of Return Message

5:


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## 8.7 Inquire the All Status

To inquire the status of AC, PSTN, INPUT, ACC, TIME and OUTPUT you can send the following SMS command to the unit.

SMS Command:

*IAS?*

Example of Return Message

AC-ON
PSTN-ON
INPUT1-OFF
INPUT2-ON
INPUT3-OFF
ACC-9999
TIME-00:00:00
OUTPUT1-OFF
OUTPUT2-ON
OUTPUT-3-OFF

## 8.8 Checking the Current Time Status via SMS

To check the current time, you can send the following SMS command to the unit.

SMS Command:

*TIM?*

Example of Return Message

TIME-01:35:50


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## 8.9 Technical Specifications

1. Environment temperature: 0~+50℃
2. Relative humidity: 10%~95%
3. Air pressure: 86~106kpa
4. Environment yawp: ≤60dB (A)
5. Working frequency: GSM900MHz/GSM1800MHz
6. Stability of frequency: better than 2.5PPM
7. Signal sensitivity: -103dBM
8. Transmit power: <2w
9. Power: 220v±15% AC
10. Input Voltage Tolerances: 1~20VDC
11. The max distance between terminal and telephone: 100M


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# Warranty

ENTERPRISE
Guarantees all MXGSM-2 GSM Terminal against defective parts and workmanship. ENTERPRISE Shall, at its option, repair or replace the defective equipment upon the return of such equipment to any branch. This warranty applies ONLY to defects in components and workman-ship and NOT to damage due to causes beyond the control of , such as incorrect voltage, lightning damage, mechanical shock, water damage, fire damage, or damage arising out of abuse and improper application of the equipment.

Note: Wherever possible, return only the PCB to Service Centres.
DO NOT return the enclosure.

# WARNING

For safety reasons, only connect equipment with a telecommunications compliance label. This includes customer equipment previously labelled permitted or certified.


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